VECTOR SCALING SYSTEM FOR G.728 ANNEX G
ABSTRACT OF THE DISCLOSURE

A method, by a processing device, for scaling an M-bit integer input vector containing one or more vector elements. The method comprises receiving a maximum permitted left shift (MLS) value for the input vector, said MLS value being less than or equal to M - 2; determining a minimum left shift (NLS_MIN) for scaling said vector element with the largest magnitude; employing said NLS_MIN value to determine whether said input vector is a zero input vector, or a non-zero input vector irrespective of the positive or negative value of the largest element values of said non-zero input vector; if a non-zero input vector is determined, offsetting said NLS_MIN value by said MLS value to obtain an actual number of left shifts (NLS) value for scaling said input vector; and if a zero input vector is determined, offsetting said NLS_MIN value by said MLS value to obtain the NLS value.

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